

REMARKS

Claims 1-12, 14, 16-24, 26, and 28 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent Publication No. 2002/00304170 (Tiedemann). Claims 13, 15, 25, and 27 stand rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Tiedemann.

Claims 1, 10, 16, and 28 were amended to further clarify the iterative technique employed. Claims 2, 3, 5, 6, 10, 12, 13, 14, 16-18, 20, 25 and 26 were amended to provide consistency with their respective independent claims.

The invention set forth in the claimed subject matter as amended includes, among other things, the general features of assigning at least one channelization code to each of a plurality of data packets, assigning portions of power available for communicating to at least a subset of the channelization codes based on a plurality of channel quality metrics, and iteratively determining values for the portions of the power and the number of channelization codes to optimize a capacity of a channel for communicating the data packets.

Tiedemann fails to teach or suggest these features. Tiedemann shows prioritizing packets into constant bit rate (CBR), variable bit rate (VBR), and available bit rate (ABR) categories. Tiedemann is completely silent regarding how power is assigned to the CBR and VBR packets. Tiedemann only states that the remaining power is allocated to the ABR traffic after the CBR and VBR assignments are complete (see paragraph 0034). Tiedemann is directed to transmitting the ABR traffic with power levels less than the minimum necessary to ensure the data can be extracted to result in the transmitter always transmitting at a fixed power level. Retransmission occur during later frames to provide sufficient power to allow decoding of the symbol.

Tiedemann is completely silent regarding how power assignments and numbers of channelization codes are made. With respect to the claimed subject matter, Tiedemann includes

absolutely no details regarding iteratively determining values for the portions of the power and the number of channelization codes to optimize a capacity of a channel for communicating the data packets.

It appears that the Office Action asserts that this iterative approach is taught in paragraph 0035, however, this passage merely mentions selecting ABR streams with power requirements likely to meet the available power or evenly splitting the available power. Neither of these techniques imply an iterative technique. Moreover, Tiedemann explicitly states “The base station can apply different policies to determine how best to schedule or transmit the ABR traffic streams...”.

As Tiedemann is completely silent regarding the technique used to allocate channelization codes or power, it can only be assumed that the Office Action intends to assert that these features are inherent in Tiedemann.

As the Examiner well knows, an anticipating reference by definition must disclose every limitation of the rejected claim in the same relationship to one another as set forth in the claim. *In re Bond*, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990). To the extent the Examiner relies on principles of inherency in making the anticipation rejections in the Office Action, inherency requires that the asserted proposition necessarily flow from the disclosure. *In re Oelrich*, 212 U.S.P.Q. 323, 326 (C.C.P.A. 1981); *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1463-64 (Bd. Pat. App. & Int. 1990); *Ex parte Skinner*, 2 U.S.P.Q.2d 1788, 1789 (Bd. Pat. App. & Int. 1987); *In re King*, 231 U.S.P.Q. 136, 138 (Fed. Cir. 1986). It is not enough that a reference could have, should have, or would have been used as the claimed invention. “The mere fact that a certain thing may result from a given set of circumstances is not sufficient.” *Oelrich*, at 326, quoting *Hansgirk v. Kemmer*, 40 U.S.P.Q. 665, 667 (C.C.P.A. 1939); *In re Rijckaert*, 28 U.S.P.Q.2d 1955, 1957 (Fed.

Cir. 1993), quoting *Oelrich*, at 326; see also *Skinner*, at 1789. “Inherency ... may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.” *Skinner*, at 1789, citing *Oelrich*. Where anticipation is found through inherency, the Office’s burden of establishing *prima facie* anticipation includes the burden of providing “...some evidence or scientific reasoning to establish the reasonableness of the examiner’s belief that the functional limitation is an inherent characteristic of the prior art.” *Skinner* at 1789.

It does not necessarily flow that Tiedemann use the iterative technique set forth in the claimed subject matter. Tiedemann explicitly states that different techniques may be used, so the position that Tiedemann inherently contemplates the claimed subject matter as a matter of necessity is untenable. Tiedemann provides no equations or optimization guidelines that teach how a capacity of the channel may be optimized. Moreover, the technique of the claimed subject matter is not obvious in view of Tiedemann in light of the lack of teaching for power and channelization codes. To establish a *prima facie* case of obviousness, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974).

For these reasons, claims 1, 10, 16, 28, and all claims depending therefrom are allowable. Applicants respectfully request the rejections of these claims be withdrawn.

With respect to the dependent claims, the specific features set forth for the iterative technique and the use of optimization parameters and cost functions are neither taught nor suggested. Applicants respectfully request that any subsequent Office Action delineate with specificity how such teachings are found in the art.

In view of the foregoing, Applicants respectfully submit that all pending claims are in condition for allowance. The Examiner is invited to contact the undersigned at (713) 934-4070 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

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